

# Inside Wallops

National Aeronautics and Space Administration  
Goddard Space Flight Center  
Wallops Flight Facility, Wallops Island, Va.

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## WEIGHING The Decision

Wallops Research Range Provides Launch Feasibility Studies With STK-Based Mission Planning Lab

Every launch range faces its own set of challenges, and Wallops Research Range on Virginia's Eastern Shore is no exception. An operational range and a test bed, the NASA-owned facility launches proven and evaluation systems including expendable launch vehicles, sounding rockets, UAVs, and balloons laden with science experiments.

With its quick-turnaround and low cost for suborbital and small orbital launches, the range attracts customers – such as the departments of Defense and Homeland Security; the National Oceanic and Atmospheric Administration (NOAA); the Defense Advanced Research Projects Agency (DARPA); and various commercial companies – with missions that require Wallops' fixed and mobile ground systems to be uniquely configured.

Customers are often unaware of the implications of certain test articles or



*Weighing The Decision appeared in the February issue of "In View".*

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operations, or how their plans fit with the range's constraints.

To help assess critical mission concept areas quickly for technical feasibility, safety, and cost, the Wallops Research Range established its Mission Planning Lab (MPL).

Based on AGI's core STK analysis software, the MPL integrates Wallops' empirical models with STK's physics-

based geometry engine for detailed analysis regarding vehicle characteristics, range setup, flight profiles, and mission-specific objectives.

The software then produces dynamic 3-D simulations that assist Wallops analysis and customers in evaluating choices about platform selection, flight profiles, and range-asset placement.

"There are hundreds of decisions involved in payload, vehicle, ground system and operational concepts where a tiny change makes a huge impact on cost or technical feasibility," says Jay Pittman, chief of the Range and Mission Management Office. "Our goal for every mission is 'safe success'. AGI's software tools and additions to them in the Mission Planning Lab let us see 'safe success' on screen long before it happens in flight."

**Note: The team that created the MPL at Wallops is Sandy Kleckner, Ben Cervantes, and Jessica Thompson, NASA Systems Software Engineering Branch.**

## In the Spotlight

A team from Kirkland Air Force Base, N.M., and Lockheed Martin recently completed a site visit at Building Y-15 on Wallops Island with John Clauss, NASA Facilities Management Branch, and Kenny Taylor, Wallops Institutional Consolidated Contract (WICC) Electrical Shop Supervisor. They were particularly concerned about requirements to provide power to their Transportable Space Test and Evaluation Resource (TSTR) van.

Following the site visit they expressed how impressed they were with the technical knowledge of the personnel and how confident they felt that Wallops could meet their needs. They also were impressed with the "can do" attitude and willingness to work after normal hours and over the weekend if needed to be prepared for the arrival of the TSTR van on Monday, March 12.

The technical support provided by John and Kenny on NFire and TacSat2 is deeply appreciated.

*March  
is  
Women's History Month*



## Wallops Shorts..... On the Road

Phil Eberspeaker, NASA Sounding Rockets Program Office, was the keynote speaker and gave a presentation on the "Mathematics of Getting To Mars" at the Math Honors Society New Member Induction ceremony held at James M. Bennett High School, Salisbury, MD., on February 22.

## NRL Scientist Says Thanks

Dr. Ray Cruddace of the Naval Research Center is retiring. Cruddace has conducted several missions with the Sounding Rockets Program Office (SRPO) over the years. The following is a quote from an e-mail he sent to Phil Eberspeaker, chief of the SRPO:

"I have enjoyed immensely working with the NASA and NSROC teams over the 10 years of this project, and would like here to express my sincere thanks to all in both organizations, whose unhesitating and highly professional response to many requests has played a major role in our success so far.

May I wish WFF continuing success in the years to come, and hope that this might lead eventually to the launch of low-cost orbital payloads."

## Mandatory IT Security Training

All Goddard Space Flight Center employees are required to complete IT Security training via the SATERN website.

Nonsupervisory employees (civil service and contractor) who use a computer to accomplish work for NASA are required to complete the course entitled "Basic IT Security for 2007."

Off-site contractors who access any Goddard network are also required to complete the training.

All Goddard civil service supervisors are required to complete the course entitled "IT Security for Managers 2007."



The deadline for completion is Friday, March 30.

For questions regarding the training courses, call Cheryl Fister at x66-9953; for questions regarding SATERN, call William Bennett at x66-4616.

## Aerobics Club Spring Schedule

### Monday

11:30 a.m. – Noon Step Aerobics  
4:45 - 5:45 p.m. Step Aerobics/Toning

### Tuesday

11:30 a.m. - 12:30 p.m.  
Power Cut Toning Program  
4:30 - 5:30 p.m.  
Power Cut Toning Program

### Wednesday

11:30 a.m. – Noon Step Aerobics  
4:45 - 5:45 p.m. Step Aerobics/Toning

### Thursday

11:30 a.m. - 12:30 p.m.  
Power Cut Toning Program  
4:30 - 5:30 p.m.  
Power Cut Toning Program

### Friday

11:30 - Noon Step Aerobics  
4:45 - 5:45 p.m. Toning

All classes are in the Building D-10, Gymnasium. Step aerobics lunch-time classes (1/2 hour) are \$1.50 per class for non-members, \$1 for members. Power cut lunch-time classes (1 hour) are \$5 per class for non-members, \$4 for members



Evening classes on Monday, Wednesday and Friday are \$3 per class for non-members, \$2 for members. The evening power cut classes on Tuesday and Thursday are \$5 per class non-members, \$4 for members

Annual membership dues are \$12 and members have an option to pay by the month.

For more info visit the Wallops Aerobics Club web page <http://www.wff.nasa.gov/WAC/> or call Ginny Johnston at x1551.

## Pioneering Women's Panel Brown Bag Luncheon

March 15

11:30 a.m. - 12:45 p.m.

Williamsburg Room, Building E-2

Panel members are Valorie Burr, Chief, NASA Procurement Operations Division; Frances Latimer, Writer; Dr. Aprille Ericsson, NASA Instrument Manager; Pat Dworske, NASA Program Support Specialist; and Kim Hill, Navy AEGIS Program Manager.



The theme for National Women's History Month, March 2007, is ***Generations of Women Moving History Forward***, and celebrates the many generations of women who, with their amazing intelligence, talent, courage and tenacity, testify to the myriad ways that generations of women have moved history forward.

For further information contact Kathryn Redden at x2187.

## St. Patrick's Celebration

5 p.m. on March 15

Rocket Club  
Building F-3



Free food.  
Appropriate beverages for sale.

## Ask the Administrator

NASA employees are invited to visit the Administrator's Corner on the InsideNASA Web site at: <http://www.insidenasa.nasa.gov> to submit questions to Administrator Michael Griffin regarding the agency, its programs and policies.

To submit your question, click on the "Ask a Question" feature and complete the online form. To read the administrator's answers to employee questions posted on the site, select the "Administrator's Answers" feature. The InsideNASA site will preserve the anonymity of all submitters unless they choose to provide their name.

*Inside Wallops* is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of *Inside Wallops* also may be found on the NASA Wallops Flight Facility homepage: [www.wff.nasa.gov](http://www.wff.nasa.gov)

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